

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,017	06/29/2006	Shigenobu Ikenaga	1155-0286PUS1	8055
2292 7590 01/08/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER	
			LU, C CAIXIA	
FALLS CHURC	JH, VA 22040-0747	<b>S</b>	ART UNIT	PAPER NUMBER
			1713	<del>-</del>
SHORTENED STATUTORY	Y PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE	
3 MON	NTHS	01/08/2007	ELECTRONIC	

## Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/08/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

	Application No.	Applicant(s)				
	10/550,017	IKENAGA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Caixia Lu	1713				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
•—	 s action is non-final.					
,						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-12</u> is/are pending in the application.						
	4a) Of the above claim(s) <u>2-9,11 and 12</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1 and 10</u> is/are rejected.						
7)⊠ Claim(s) <u>10</u> is/are objected to.						
8) Claim(s) 1-12 are subject to restriction and/or	election requirement.					
Application Papers	·					
9)☐ The specification is objected to by the Examine						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ul>						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da 5) Notice of Informal P					
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date <u>See Continuation Sheet.</u> 5) Notice of Informal Patent Application 6) Other:						

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :9/23/05,11/2/05, 6/29/06&8/9/06.

Page 2

Application/Control Number: 10/550,017

**Art Unit: 1713** 

#### **DETAILED ACTION**

#### Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1 and 10, drawn to a propylene/butene random copolymer.

Group II, claim(s) 2, drawn to a propylene/butene/ethylene copolymer.

Group III, claim(s) 3-5, drawn to a blend comprising the propylene/butene random copolymer of Group I.

Group IV, claim(s) 6-8, drawn to a transition metal complex and the catalyst thereof.

Group V, claim(s) 9, drawn to a polymer blend.

Group VI, claim(s) 11 and 12, drawn to film comprising the propylene/butene random copolymer of Group I.

2. The inventions listed as Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: (i) Groups I, III together with VI and the rest of the Groups do not share a common technical feature; (ii) the common feature shared among Groups I, III and VI is the propylene/butene copolymer, however, such a copolymer is taught in Kawai et al. (EP 1 138 687); (iii) Group II and the rest of the Groups do not share a common technical feature; (iv) Group

Application/Control Number: 10/550,017

Art Unit: 1713

V and the rest of the Groups do not share a common technical feature; and (v) Groups
VI and the rest of the Groups do not share a common technical feature.

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Four different polyolefin blends species defined by (EL-1) to (EL-4) respectively.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the species listed above in the following manner:

The four blend species are all claimed in claim 9

The following claim(s) are generic: none.

Application/Control Number: 10/550,017 Page 4

Art Unit: 1713

5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Pursuant to PCT Rule 13.2 and PCT Administrative Instructions, Annex B, Part 1(f)(I)(B)(2), the species are not art recognized equivalents.

- 6. During a telephone conversation with Attorney Mark Konieczny on December 14, 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1 and 10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 2-9 and 11-12 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### Specification

8. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a <u>single</u> paragraph on a separate sheet within the range of 50 to 150 words. The abstract of the instant application contains more than one paragraph. Correction is required. See MPEP § 608.01(b).

The typographic error of "containg" of line indicated line 5 of the Abstract should also be corrected.

## Claim Objections

- 9. Claim 10 is objected to because of the following informalities and appropriate correction is required:
- i) in the indicated line 4 of page 311, the term "obtainable" should be replaced with -- obtained--;
- ii) in the indicated line 16 of page 311, the term --from-- should be inserted after the term "different"; and
- iii) in the indicated line 3 of page 312, the extraneous phrase "and j is an integer of 1 to 4," should be deleted.

### Claim Rejections - 35 USC § 102/103

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 10/550,017

Art Unit: 1713

12. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kawai et al. (EP 1 138 687).

The instant claims are directed to propylene/butene copolymer with specified triad isotacticity, molecular weight distribution, intrinsic viscosity and melting point (Tm). Kawai's Examples 37 to 42 demonstrate the preparation of propylene/butene copolymer in the presence of a metallocene catalyst, dimethylmethylene(3-tert-butyl-5-methylcyclopentadienyl)fluorenyl zirconium dichloride (pages 237-238), wherein the Tm is in the range of 73-108 °C and intrinsic viscosity is in the range of 0.89 to 3.56 dl/g, both properties of the copolymers are in the range of the instant claims. Although Kawai's examples do not disclose all the claimed limitations such as the mol% of butene in the copolymer, molecular weight distribution, isotacticity and the specified relationship of the Tm and the mol% of butene in the copolymer, the polymers disclosed in the prior art are made by processes using catalyst compositions which are identical or substantially identical to that disclosed in Example 1 of the instant specification. Under these circumstances, one of the ordinary skill in the art would have expected that the propylene/butene copolymer would be identical to the copolymer of the instant claims and thus inherently have the claimed limitations.

Once a product appearing to be substantially identical is found and a 35 USC 102/103 rejection made, the burden of proof is shifted to the applicant to show an unobvious difference. In re Fitzgerald, 205 USPQ 594. In re Fessmann, 180 USPQ 324. Applicants have not met their burden to demonstrate an unobvious difference between the claimed product and the products of the prior art examples.

Application/Control Number: 10/550,017 Page 7

**Art Unit: 1713** 

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caixia Lu whose telephone number is (571) 272-1106. The examiner can normally be reached from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful and the matter is urgent, the examiner's supervisor, David Wu, can be reached at (571) 272-1114. The fax numbers for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.

Caixia Lu, Ph. D. Primary Examiner